

Application No.: 09/691352

Case No.: 55126US002

Remarks

Claims 2-11, 26-29, 35, 37 and 39-42 are pending.

§ 103 Rejections

Claims 2-11, 26-29, 35, 37 and 39-42 stand rejected under 35 USC § 103(a) as being unpatentable over U.S. Patent Number 5,783,303 to Tsuei ("Tsuei") in view of U.S. Patent Number 3,937,640 to Tajima et al. ("Tajima") and U.S. Patent Number 5,484,477 to George et al. ("George").

The Examiner states that Tsuei discloses an article with a plurality of ceramic granules bonded to a polymeric film by a radiation curable aliphatic urethane acrylic copolymer for use as part of anti-slip products or coatings for abrasive articles. The Examiner also states that Tsuei fails to teach the article being a roofing shingle or a roll of roofing material.

The Examiner then states that George teaches integrated granule products made with a ceramic coated slate base granule and coated with a film, and the granules are then adhered to the asphalt surface of a shingle backing. The Examiner also states that Tajima teaches a waterproof assembly of laminated roofing membranes with a thin film layer covering the top surface of the roofing membrane.

The Examiner's position is that it would have been obvious to one of ordinary skill in the art to have provided the thin film coating of Tsuei on the roofing membrane of Tajima, since Tajima shows the use of a thin film on the roofing membrane. The Examiner also takes the position that it would have been obvious to have provided the ceramic coated particles of George instead of the particles of Tsuei, since both provide a weather resistant surface.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicant's disclosure.

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The rejection is respectfully traversed. None of the references teach an integrated granule product comprising a film having a plurality of ceramic coated granules bonded to the film by a cured adhesive bonded to a roofing material substrate as recited in Claim 26.

Nothing would motivate one of skill in the art to take an element from the abrasive arts, namely curing abrasive grains to a film, from Tsuei and use them on a roofing shingle. The abrasive grains in Tsuei are attached to a film for use as an anti-slip or abrasive article. One looking at Tsuei would not then take the disclosure for use in a roof. Furthermore, nothing in Tajima teaches putting a film having granules bonded to a roofing material. In the embodiments with granules disclosed, the granules are placed in the bitumen. In the alternative, a polymer film may be placed on top instead of the granules. Col. 9, lines 34-45 of Tajima.

Additionally, as previously argued, the element of a ceramic coated granule is not taught in Tsuei. Therefore, the combination of Tsuei and Tajima would not teach all the claim limitations.

As argued previously, the granules of George are not in a polymer film. The combination of George and Tajima fails as well, as there is no teaching of a film having a plurality of ceramic coated granules.

The rejection of claims 2-11, 26-29, 35, 37 and 39-42 under 35 USC § 103(a) as being unpatentable over Tsuei in view of Tajima and George has also been overcome and should be withdrawn.

In view of the above, it is submitted that the application is in condition for allowance. Reconsideration of the application is requested.

Respectfully submitted,

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Date

By:

Colene H. Blank
Colene H. Blank, Reg. No.: 41,056
Telephone No.: (651) 737-2356

Office of Intellectual Property Counsel
3M Innovative Properties Company
Facsimile No.: 651-736-3833